

Applicant : Gerhard Schwar
Serial No. : New Application
Filed : February 28, 2002
Page : 6

Attorney's Docket No.: -517US1 / PA 33892US-829/zp

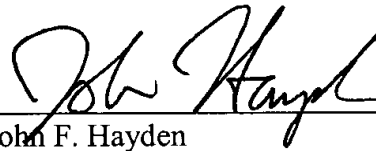
REMARKS

The amendments to the abstract and claims made herein are to correct minor grammatical errors and to place the application in better form for examination. No new matter is added.

Attached is a marked-up version of the changes being made by the current amendment.

Applicants ask that all claims be examined. Please apply any charges or credits to Deposit Account No. 06-1050.

Respectfully submitted,



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Applicant : Gerhard Schwarz
Serial No. : New Application
Filed : February 28, 2002
Page : 7

Attorney's Docket No.: 0 517US1 / PA 33892US-829/zp

Version with markings to show changes made

In the claims:

Claims 1-25 have been amended as follows:

1. (Amended) An electric plug connector [(1)], in particular for explosion-proof areas, comprising:

a plug, [(2) and]

a socket [(3) which includes] including at least a housing [(4)] and a socket insert [(7)] supported in said housing [(4)] such that [it] the socket insert is rotatable between off and on positions [(5,6)], said socket insert [(7)] being adapted to be rotated between its positions [(5,6)] by means of the plug [(2)] inserted in the socket [(3)], **[characterized in that] and**

a locking **[means (8) is]** element supported in the socket insert [(7)] such that [it] the locking element is displaceable between a locking position [(9)] and a release position [(10)], said locking **[means (8)]** element being provided with at least one coding projection [(11)] which, in the condition in which the plug [(2)] is inserted in the socket insert [(7)], is adapted to be arranged in a complementary coding aperture [(12)] in the plug [(2)] thus arranging the locking means [(8)] at its release position [(10)], wherein the socket insert [(7) being] is rotatable between the off and on positions [(5,6)] when the locking means [(8)] is in the release position [(10)].

2. (Amended) An electric plug connector according to claim 1, **characterized in that** wherein the locking **[means (8)]** element is implemented as a locking pin [(13)] which is supported in the socket insert [(7)] such that it is longitudinally displaceable between the locking and release positions [(9, 10)] essentially in the plug-in direction [(14)] of the plug [(2)].

3. (Amended) An electric plug connector according to claim [1 or] 2, **characterized in that** wherein, when occupying the release position [(10)], the locking

Applicant : Gerhard Schwarz
Serial No. : New Application
Filed : February 28, 2002
Page : 8

Attorney's Docket No.: 0 517US1 / PA 33892US-829/zp

pin [(13)] projects with one of its ends [(15)] as a coding projection [(11)] beyond the socket insert [(7)] in the direction of the plug [(2)].

4. (Amended) An electric plug connector **[according to at least one of the preceding claims, characterized in that]** according to claim 2 wherein the locking pin [(13)] has a force applied thereto in the direction of the release position [(10)].

5. (Amended) An electric plug connector according to **[at least one of the preceding claims, characterized in that]** claim 2 wherein the locking pin [(13)] is arranged essentially centrally in the socket insert [(7)].

6. (Amended) An electric plug connector according to **[at least one of the preceding claims, characterized in that]** claim 1 wherein the coding projection [(11)] is implemented such that its cross-section is complementary to the cross-section of the coding aperture [(12)].

7. (Amended) An electric plug connector according to **[at least one of the preceding claims, characterized in that]** claim 2 wherein the socket insert [(7)] is provided with a longitudinal guide means [(16)] for the locking pin [(13)], the cross-section of said longitudinal guide means being substantially equal to the cross-section of the coding projection [(11)].

8. (Amended) An electric plug connector according to **[at least one of the preceding claims, characterized in that]** claim 7 wherein reception holes [(17)] for electric contact pin bushings [(18)] are arranged around said longitudinal guide means [(16)] in the socket insert [(7)].

9. (Amended) An electric plug connector according to **[at least one of the preceding claims, characterized in that]** claim 7 wherein the locking pin [(13)] projects beyond said longitudinal guide means [(16)] with its lower end [(19)] located opposite

Applicant : Gerhard Schwarz
Serial No. : New Application
Filed : February 28, 2002
Page : 9

Attorney's Docket No.: 0 -517US1 / PA 33892US-829/zp

the plug [(2)] and is provided with a stop [(20)] which is adapted to be brought into contact with a lower end [(21)] of the longitudinal guide means [(16)].

10. (Amended) An electric plug connector according to **[at least one of the preceding claims, characterized in that]** claim 9 wherein the stop [(20)] is implemented as an upper end [(22)] of an end sleeve [(23)] of the locking pin [(13)] which is open at the bottom, said end sleeve being adapted to accommodate at least part of a spring [(24)] for applying a force to the locking pin [(13)] in the direction of the locking-pin release position [(10)].

11. (Amended) An electric plug connector according to **[at least one of the preceding claims, characterized in that]** claim 10 wherein a centering pin [(25)] is arranged centrally in the end sleeve [(23)], at least part of the spring [(24)] being adapted to be pushed onto said centering pin [(25)].

12. (Amended) An electric plug connector according to **[at least one of the preceding claims, characterized in that]** claim 8 wherein the socket insert [(7)] is supported in an annular element [(27)] at least in the lower end section thereof [(26)], the socket insert [(7)] being adapted to be inserted together with said annular element [(27)] in a plug housing [(28)] which is releasably secured to the housing [(4)].

13. (Amended) An electric plug connector according to **[at least one of the preceding claims, characterized in that]** claim 12 wherein the annular element [(27)], the socket insert [(7)] and the plug housing [(28)] are flush with one another at their respective lower ends [(29, 30, 58)] facing the housing [(4)] and project partially into a housing aperture [(31)] in said housing [(4)].

14. (Amended) An electric plug connector according to **[at least one of the preceding claims, characterized in that]** claim 13 wherein the plug housing [(28)] is

Applicant : Gerhard Schwarz
Serial No. : New Application
Filed : February 28, 2002
Page : 10

Attorney's Docket No.: 0 517US1 / PA 33892US-829/zp

provided with a circumferentially extending edge flange [(32)] which is releasably secured to an edge [(33)] of said housing aperture [(31)].

15. (Amended) An electric plug connector according to **[at least one of the preceding claims, characterized in that]** claim 13 wherein the plug housing [(28)] is adapted to be connected to a diskshaped switching means [(34)] within the housing [(4)], said switching means [(34)] supporting the contact pin bushings [(18)] and comprising at **[l east]** least one fastening disk [(35)] and one switching disk [(36)] which are rotatable relative to one another and disposable at two locking positions [(37, 38)].

16. (Amended) An electric plug connector according to **[at least one of the preceding claims, characterized in that]** claim 15 wherein the fastening disk [(35)] is provided with a locking aperture [(40)] on its front face [(39)] facing the socket insert [(7)], the lower end [(19)] of the locking pin [(13)] being insertable into said locking aperture [(40)], whereby the socket insert [(7)] and the fastening disk [(35)] are coupled such that they are secured against rotation relative to one another.

17. (Amended) An electric plug connector according to **[at least one of the preceding claims, characterized in that]** claim 15 wherein the annular element [(27)] is provided with a dog [(41)] projecting towards the switching means [(34)], said dog [(14)] extending through a slot guide means [(42)] in the fastening disk [(35)] and engaging a dog reception means [(43)] arranged on the switching disk [(36)].

18. (Amended) An electric plug connector according to **[at least one of the preceding claims, characterized in that]** claim 15 wherein the annular element [(27)] has a substantially L-shaped guide slot [(44)] for an arresting insert [(46)] which is supported on the outer circumference [(45)] of the socket insert [(7)] in a longitudinally displaceable manner, said arresting insert [(46)] being adapted to be moved along the vertical L-leg [(47)] by a plug collar [(48)] of the plug [(2)], when the plug is being

Applicant : Gerhard Schwarz
Serial No. : New Application
Filed : February 28, 2002
Page : 11

Attorney's Docket No.: 00-517US1 / PA 33892US-829/zp

inserted in the socket insert [(7)], and subsequently along the horizontal L-leg [(49)] by rotating the socket insert [(7)] relative to the annular element [(27)].

19. (Amended) An electric plug connector according to **[at least one of the preceding claims, characterized in that]** claim 18 wherein the arresting insert [(46)] is provided with an arresting projection [(50)] which projects radially outwards relative to the socket insert [(7)] and which is adapted to be brought into contact with edges [(51)] of the guide slot [(44)].

20. (Amended) An electric plug connector according to **[at least one of the preceding claims, characterized in that]** claim 18 wherein the arresting insert [(46)] is supported in at least one support pocket [(52)] such that it is displaceable in the longitudinal direction [(53)] of the socket insert [(7)], said support pocket [(52)] being arranged on the lower end section [(26)] of the socket insert [(7)].

21. (Amended) An electric plug connector according to **[at least one of the preceding claims, characterized in that]** claim 20 wherein a spring [(55)] for applying a force to the arresting insert [(46)] in the direction of the plug [(2)] is arranged between said arresting insert [(46)] and the base [(54)] of the support pocket [(52)].

22. (Amended) An electric plug connector according to **[at least one of the preceding claims, characterized in that a plurality of]** claim 20 wherein support pockets [(52) is] are arranged along the circumference of the socket insert [(7)], said support pockets [(52)] being especially arranged in juxtaposition.

23. (Amended) An electric plug connector according to **[at least one of the preceding claims, characterized in that]** claim 1 wherein the coding projection [(11)] has a semicircular, divided circular, circular, bident, trident or multident or an angular cross-section.

Applicant : Gerhard Schwarz
 Serial No. : New Application
 Filed : February 28, 2002
 Page : 12

Attorney's Docket No.: 0 517US1 / PA 33892US-829/zp

24. (Amended) An electric plug connector according to **[at least one of the preceding claims, characterized in that]** claim 15 wherein the fastening disk **[(35)]** is provided with a guide wall **[(56)]** projecting in the direction of the socket insert **[(7)]** and engaging an annular groove **[(57)]** in the lower end **[(58)]** of the socket insert **[(7)]** so as to rotatably support the same.

25. (Amended) An electric plug connector according to **[at least one of the preceding claims, characterized in that]** claim 17 wherein the switching-disk back **[(59)]** which is located opposite the fastening disk **[(35)]** has provided thereon at least one trip cam **[(60)]**, which, in response to a rotational displacement of the switching disk **[(36)]** by means of the dog **[(41)]**, adjusts a switching means **[(61)]** of an interrupter switch **[(62)]** to a connection position or to an interrupt position, said interrupter switch **[(62)]** being arranged in the housing **[(4)]**.

In the abstract:

The abstract has been amended as follows:

[The] An electric plug connector **[is]** intended to be used **[especially for]** in explosion-proof areas~~.~~ **It comprises]** includes a plug and a socket. The **[latter]** socket includes in a housing a socket insert which, in the inserted condition of the plugs, is supported such that it is rotatable between an off position and an on position.[

In said socket a] The socket supports a locking **[means is supported such]** that it is adjustable between a locking position and a release position~~], said]~~. The locking **[means being]** element is provided with at least one coding projection which, in the condition in which the plug is inserted in the socket, projects into a complementary coding aperture and releases the locking means, whereupon the socket can be switched from **[said]** the off position to **[said]** the on position.